

REMARKS/ARGUMENTS

This letter is responsive to the Office Action mailed on December 29, 2005. Accordingly, this response is timely filed.

Amendments to the Description

The Applicant has inserted a new paragraph before paragraph 1 to insert information for a cross-referenced application. This information was provided in the Application Data Sheet when the subject application was filed.

The Applicant has made amendments to paragraphs 10, 12, 21 and 22 to properly refer to symbols. On the second lines of paragraphs 10 and 12 the symbol V_{ss} has been replaced with the correct symbol V_{sa} . On the fourth and fifth lines of paragraph 21, the symbol V_{as} has been replaced with the correct symbol V_{sa} . In equation 3 on the sixth line of paragraph 22, the symbol V_{min} has been replaced with the correct symbol V_{mi} . These amendments have been made to correct inadvertent typographical errors.

The Applicant has also amended paragraphs 11 and 14 for clarity. On line 3 of paragraphs 11 and 14, the term "electrochemical cells" has been used. Furthermore for line 6 on paragraph 14, the text "cell a" has been replaced with the words "a cell".

The Applicant has also amended paragraph 20 to insert a period at the end of the second sentence.

The Applicant has also amended the second sentence in paragraph 23 for clarity. In particular, the sentence has been reworded to read "...from which the minimum value is selected as a minimum voltage V_{min} for the entire electrochemical cell stack 10." Thus, the phrase "minimum value is selected as a" has been introduced and the voltage reference has been corrected to be " V_{min} ". The original passage indicated that the minimum cell voltage for the entire stack is determined from the minimum cell voltages V_{mi} for the individual cell groups and the revision to this sentence is just intended to add

clarity. In addition on line 9 of paragraph 23, the Applicant has corrected the spelling of the symbol V_{mi} .

The Applicant has also amended paragraphs 25 and 29 to ensure that the proper reference numerals are used with the corresponding terms. In particular, on lines 6 and 12 of paragraph 25, the reference numeral for the processing unit has been corrected to be 122. Also in the last line of paragraph 29, the reference numeral for the compressor has been changed to 108. These amendments are supported by Figure 3, and the portion of the application that discusses Figure 3.

Claim Amendments

In this response, claims 1, 3-6, 9, 11-14, 17, 21, 22, 25, 29 and 30 have been amended. Claims 2, 10, 17 and 26 have been cancelled without prejudice.

The Applicant has amended claim 1 to recite how the minimum cell voltage for a given cell group is estimated. This feature is recited in claim 2. Accordingly, claim 2 has now been cancelled. The Applicant has also amended claim 1 by adding the symbol V_{mi} at the end of step (e).

Claims 9, 17 and 25 have been amended in a similar fashion by incorporating the subject matter recited in claims 10, 18 and 26, respectively. Accordingly, claims 10, 18 and 26 have been cancelled without prejudice.

Due to the cancellation of claims 2, 10, 18 and 26, the dependency of claims 3-6, 11-14, 21, 22, 29 and 30 have been revised to depend on the claims in which the subject matter of the cancelled claims have been incorporated.

The Applicant has also ensured that the subject matter imported into claims 1, 9, 17 and 25 properly refer to the symbol V_{sa} rather than the symbol V_{ss} which was due to a typographical error.

Claim Objections

In the Office Action, the Examiner objected to claims 2, 9, 10, 18, 25 and 26 due to informalities. The Examiner noted that the term V_{ss} has not been described in the specification and argued that claims 2, 10, 18 and 26 should be corrected. With regards to claims 9 and 25, the Examiner noted that the term "the plurality of cell groups" on lines 2-3 of these claims lacks a proper antecedent basis.

In response, the Applicant has amended claims 9 and 25 to refer to the term "the plurality of electrochemical cells" rather than the term "the plurality of cell groups". The Applicant submits that this term in claims 9 and 25 has a proper antecedent.

With respect to claims 2, 10, 18 and 26, the Applicant has cancelled these claims and the objection is now moot. However, the subject matter of these claims has been incorporated into claims 1, 9, 17 and 25, and the term V_{ss} has been replaced with the term V_{sa} . The Applicant submits that the term V_{ss} was used incorrectly and should have been V_{sa} .

Claim Rejections

The Examiner rejected claims 1, 9, 17 and 25 under 35 U.S.C. 102(b) as being anticipated by James (U.S. 6,140,820). The Examiner also rejected claims 3-8, 11-16, 19-24 and 27-32 under 35 U.S.C. 103(a) as being unpatentable over the James reference.

The Examiner further noted that claims 2, 10, 18 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.


In response, the Applicant has amended claims 1, 9, 17 and 25 by incorporating the subject matter of claims 2, 10, 18 and 26, respectively. Accordingly, the Applicant respectfully submits that these claims are now allowable. Furthermore, since claims 3-8, 11-16, 19-24 and 27-32 are dependent upon claims 1, 9, 17 and 25 respectively, and introduce other patentable subject features, the Applicant respectfully submits that these claims are also allowable over the cited reference.

Conclusion

In view of the foregoing, the Applicant respectfully submits that the application is now in condition for allowance and requests that a timely Notice of Allowance be issued in this case. If the Examiner feels that a telephone discussion would be helpful to resolve any issues, he is respectfully requested to contact the undersigned.

Respectfully submitted,

BERESKIN & PARR

By 

Tony R. Orsi
Reg. No. 55,831
Tel: 416-957-1603